A-79-32
IV-D-4

SOHIO THE STANDARD OIL COMPANY

June 14, 1985

Central Docket Section
U.S. Environmental Protection Agency
401 M Street, SW
Washington, D.C. 20460

RECEIVED
ENVIRONMENTAL PROTECTION
AGENCY
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CENTRAL DOCKET
SECTION

Attention: Docket No. OAQPS-A-79-32

Re: Standards for flares used to control volatile organic compound (VOC) emissions - Grant of Petition for Reconsideration and Proposed Rules (50 Federal Register 14941; April 16, 1985)

Dear Sir or Madam:

The following comments are submitted on behalf of The Standard Oil Company (Ohio), hereinafter referred to as Sohio. Sohio has interests in oil and gas exploration and production, petroleum refining, and organic chemicals manufacturing. The proposed rules could affect new construction, reconstruction, or modifications in these areas.

Sohio supports the EPA's decision to grant the Chemical Manufacturers' Assocation's (CMA's) Petition for Reconsideration on the requirements for flares in the New Source Performance Standard (NSPS) for equipment leaks in the synthetic organic chemicals manufacturing industry. The EPA's action is appropriate and warranted by Section 307(d)(7)(B) of the Clean Air Act. The CMA and EPA have now both completed studies which demonstrate that the restrictions previously placed on the use of flares were unnecessarily restrictive. The proposed revisions, to allow higher exit gas velocities for flares, would be a significant improvement in these rules. They would allow for equivalent protection of the environment at reduced costs to manufacturers.

Sohio also supports the EPA's decision to incorporate this revision in flare requirements in other, similar NSPS's. As EPA states in the notice, there is no reason flares should not work as well to control emissions from these other source categories as they would for equipment leaks in organic chemicals manufacturing. In fact, Sohio has urged EPA to adopt revised standards for flares in our previous comments on specific NSPS's (see attachments).

Finally, the April 16 notice does not mention onshore natural gas plants. The EPA on January 20, 1984 (49 Federal Register 2036) proposed a NSPS for equipment leaks of VOC from onshore natural gas plants. This proposal included the same restrictive requirements for flares which EPA is now proposing to revise for other source categories. Sohio urged EPA to remove these restrictions in our comments on the gas plant NSPS (see enclosure). Because EPA has proposed a revision in the standards for flares in all other NSPS's, the final rules revising these standards should make it clear that the proposed rules for onshore gas plants are also to be revised.

Thank you for your consideration of these comments. Please direct any questions to the undersigned (phone: 216/575-8033).

Sincerely,

Peter W. McCallum
Senior Corporate Environmental Specialist

PWM/dmk/AC7

SOHIO THE STANDARD OIL COMPANY
MIDLAND BUILDING, CLEVELAND, OHIO 44115-1098

April 5, 1984

R E FARRELL
DIRECTOR
HEALTH SAFETY
AND
ENVIRONMENTAL QUALITY

Central Docket Section (LE-131)
Attention: Docket Number A-80-20-B
U.S. Environmental Protection Agency
401 M. Street, S.W.
Washington, D.C. 20460

RE: New Source Performance Standards for
Equipment Leaks of VOC from Onshore
Natural Gas Plants
(49 Federal Register 2036; Jan. 20, 1984)

Dear Sir or Madam:

The Standard Oil Company (Ohio) and subsidiaries would like to take this opportunity to submit comments on the above referenced notice. Sohio is active in the exploration for and production of crude oil and natural gas within the United States and is therefore interested in the development of scientifically sound regulations.

Sohio is a member of the American Petroleum Institute (API) and supports the comments submitted by API, which address many of our concerns in greater detail. This submittal highlights those areas where we believe the EPA should consider revisions to the NSPS.

1. The rules should apply only to streams containing 10% or more VOC's rather than 1% as proposed. This limitation would concentrate attention on equipment which is most likely to exhibit VOC leaks and would result in more cost effective regulations.

2. The requirements for control of VOC's from compressors should be eliminated. The majority of gas processing compressors are reciprocating compressors rather than centrifugal as assumed by EPA. The EPA assumption overstates VOC emissions from compressors, which actually contribute only minor amounts to the total. The requirement for closed vent controls also raises serious safety concerns as the closed system could increase the likelihood of explosions.

3. Given the remote locations of gas processing plants, the requirment for leak detection frequency should be reduced from monthly to quarterly monitoring. Although the proposal does allow the operator to move to quarterly monitoring, Sohio feels a quarterly system would be appropriate in the first instance.

4. The operating restrictions of flares used for VOC destruction are unnecessarily restrictive and should be modified. These requirements calling for maximum velocities and minimum Btu contents may not be needed to ensure destruction and should be studied further by EPA.

We appreciate this change to comment. Please direct any questions to the undersigned at (216) 575-8033.

Sincerely,

Peter W. McCallum
Senior Corporate Environmental
Specialist

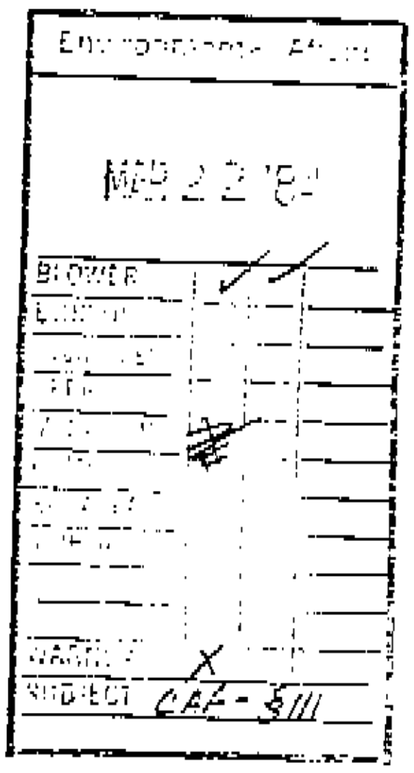
PWM/lm/0390M

THE STANDARD OIL COMPANY

MIDLAND BUILDING, CLEVELAND, OHIO 44115

R. E FARRELL
DIRECTOR
HEALTH SAFETY
AND
ENVIRONMENTAL QUALITY

March 13, 1984



Central Docket Section (LE-131)
Attn: Docket Number A-80-25
U.S. Environmental Protection Agency
401 M. Street, SW
Washington, D.C. 20460

RE: Standards of Performance for New Stationary Sources: VOC Emissions from the Synthetic Organic Chemicals Manufacturing Industry Distillation Unit Operations (48 Federal Register 57538; December 30, 1984)

Dear Sir or Madam:

The following comments on the subject notice are submitted on behalf of The Standard Oil Company (Ohio) and its subsidiaries. Sohio is involved in petroleum refining and the manufacture of synthetic organic chemicals, agricultural chemicals, and other areas. Overall, we feel that the approach taken in the proposal toward regulating VOC emissions is reasonable. Sohio also supports the comments on this matter submitted by the Chemical Manufacturers Association. There are a number of separate areas where we wish to comment and these are set out below.

1. Sohio urges that these rules be clarified so that they apply only to organic chemicals manufacturing and not petroleum refining.

   The proposed rules list 219 chemicals which, if produced by a distillation operation, bring the unit under these regulations. A number of these (for example benzene, butane, napthalene, and propane) are contained in petroleum fractions produced in petroleum refining processes. While we agree with the preamble statement at 48 FR 57541 that the production of these chemicals may be closely related to refining, pure refining processes should not be included here.

   The reason for treating petroleum refineries separately is that the process streams in a refinery represent complex mixtures which are tested and characterized in broad terms, such as boiling point ranges, rather than by specific chemical species. Thus, the refiner would not know whether regulated chemicals were present without doing extensive new testing on each process stream.

Sohio recommends that the EPA clarify this situation by amending Section 60.660 to state that the rules apply only when the chemicals on the list in Section 60.667 are produced in pure or nearly pure form. This would include petroleum refinery processes which produce benzene, for example, but would exclude crude oil distillation operations.

2. Sohio supports the EPA's decision to allow flares as control devices, as this has been demonstrated to be effective by recent research of the Chemical Manufacturers Association. However, we believe that the design and operating constraints on flares in Section 60.662 (b) are unnecessarily restrictive.

   The proposed rules would require a flared stream to have a minimum of either 300 or 200 Btu/scf and an exit velocity of less than 60 ft/sec. These are apparently the limits at which tests were run in the CMA study, and EPA is concerned that lower Btu content or higher velocities will lead to incomplete combustion. However, it should be possible to show that, for instance, a velocity lower than the maximum combined with a lower Btu content than the minimum would lead to combusion equivalent to the prescribed conditions. The rules as written do not give proper credit for control devices prior to flares, such as vent gas scrubbing systems, and may require unnecessary use of natural gas as a supplemental fuel. An alternative the EPA may want to consider is the Texas Air Control Board regulation on carbon compound waste gas streams, which outlines general start-up, shutdown, and operating conditions.

   Another problem with these standards is the requirement for velocity measurement. This may require that an orifice be placed in the vent stream piping to measure the velocity. The insertion of such a constriction would hamper the ability of the piping to handle high loads in upset conditions, possibly leading to unsafe pressure buildup in upstream equipment. Therefore, Sohio recommends deleting this requirement.

3. There appear to be two typographical errors in the TRE calculation at [illegible] these include:

   K constant should be 1.74 x

ss than" is used twice. In one
lon-halogenated H_t 5.6 MJ/scm.

comments and hope that the EPA

ly,

W. McCallum

W. McCallum
Corporate Environmental

list

A COPY FOR OAQPS

SOHIO THE STANDARD OIL COMPANY

MIDLAND BUILDING, CLEVELAND, OHIO 44115-1093

R. E. FARRELL
DIRECTOR
HEALTH SAFETY
AND
ENVIRONMENTAL QUALITY

September 28, 1984

Central Docket Section (A-130)
U.S. Environmental Protection Agency
401 M. Street, S.W.
Washington, D.C. 20460
Attn: Docket No. A-80-51

Re: New Source Performance Standards
Volatile Organic Liquid Storage Vessels
(49 Fed. Reg. 29698; July 23, 1984)

Dear Sir or Madam:

The following comments are submitted on behalf of The Standard Oil Company (Ohio), hereinafter referred to as Sohio. Sohio is involved in oil and gas exploration and production, transportation, and refining; refined products distribution and marketing; and chemicals manufacturing, among other business interests. The proposed rules for volatile organic liquid (VOL) storage could have a significant impact on each of these operations.

The American Petroleum Institute (API), of which Sohio is a member, has been instrumental in providing data and analysis which have gone into this proposed rulemaking. Sohio supports the API comments submitted in response to this notice, but also wishes to emphasize the points listed below.

1. The specifications in §60.112b (a)(3) for flares used as control devices are unnecessarily restrictive. These limit the use of steam-assisted and non-assisted flares to gas streams with a net heating value of 300 Btu/scf or greater and an exit velocity of less than 60 ft/sec. These values are based on testing done by the Chemical Manufacturers Association, but they represent only the limits at which testing actually was conducted and not absolute limits for effective flare operation. These specifications should be reviewed based on the latest available data.

2. The requirement in §60.113b to repair or remove from service, within 30 days, any tank which fails a visual inspection is unnecessarily restrictive and could present severe operating problems. At a facility such as a refinery, specific tanks are usually dedicated to specific materials. Taking a tank out of service requires finding another tank to store the material, drawing down inventories, and arranging the transfer. While this may not present great problems when dealing with just one failing tank, it is possible that a number of tanks would require attention at the same time. In order to guard against such problems in operations, we recommend that the time period for repairs or removal from service be extended to 90 days.

3. The proposed §60.116b requires the owner of a tank to maintain a record of the vapor pressure of stored material. While this is a straightforward exercise with most products, we use tanks at many facilities to store "slop oil" which is a mixture of different products. The contents of such tanks change constantly, so that it would require physical testing to determine vapor pressures day to day. This would amount to a great deal of work for only a small benefit, if any. Since slop oil storage tanks represent a small fraction of the tanks at any one facility, we recommend that these be excluded from these requirements.

Thank you for your consideration of these comments. If there are any questions, please call me at 216-575-8033.

Sincerely,

Peter W. McCallum

Peter W. McCallum
Senior Corporate Environmental
Specialist

PWM/lm/0458M